REMARKS/ARGUMENTS

Claim Amendments

The Applicant has amended claims 1, 6, 10, 12, 14, 18, 28 and 30; claims 5 and 27 have been canceled. Applicant respectfully submits no new matter has been added. Accordingly, claims 1-4, 6-26 and 28-33 are pending in the application. Favorable reconsideration of the application is respectfully requested in view of the foregoing amendments and the following remarks.

Examiner Objections – Drawings

The Drawings are objected to because Figures 1 and 2 should be designated by a legend such as Prior Art. In response, the Applicant is submitting a "formal" replacement sheet. The Examiner's approval of these drawings is respectfully requested.

Claim Rejections – 35 U.S.C. § 102(e)

Claims 1-5, 12, 13, 18-25, 32 and 33 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Liao, et al. (US 6,611,533 hereinafter Liao). The Applicant has canceled claim 5 without prejudice. Therefore, this rejection with respect to this claim is deemed to be moot. The Applicant has amended claims 1, 12 and 18 to better define the intended scope of the claimed invention. The Examiner's consideration of the amended claims is respectfully requested.

The present invention discloses a method and system for sending SS7 signaling traffic over an IP network to eliminate the need for the network to use a dedicated traffic conversion path and to eliminate intermediate connections. As claimed by amended claim 1, the present invention teaches peer-to-peer communication between signaling gateways e.g., direct communication between protocol layers in the signaling gateways. The Applicant's invention further discloses how an IP backbone may be used for permitting signaling traffic transmission from a first signaling gateway to a second signaling gateway without an intermediary hop and without the use of proprietary conversion protocols.

In summary, the Applicant respectfully submits that the present invention provides for routing SS7 signaling traffic over an IP network backbone without using proprietary protocols. The SGs are in peer-to-peer communication and eliminate the need for a dedicated conversion node or intermediate node hops. The SGs are capable of transferring SS7 signaling traffic over the IP network by converting SS7 traffic into an IP message stream and communicating directly with each other.

The Liao reference appears to disclose a method, system and apparatus for connecting the public telephone network (PTN) and an IP network. Liao utilizes TCAP messages in a first format (say SS7) in the PTN and TCAP in a second format (Internet Protocol) in the IP network. An interface with the PTN and an interface with the IP network are connected by a processor that translates PTN TCAP messages into IP network TCAP messages. (Abstract) Liao utilizes a TCAP/IP Interworking Gateway (TIPG) between a first and second node for exchanging TCAP messages between the PTN and IP network.

As noted in the discussion of Figure 5 and 6 of the Applicant's application, application of the TCAP, SCCP, MTP3, MTP2 and MTP1 layers to the traffic is well known. The difference brought by the Applicant's invention is that of Stream Control Transmission Protocol (SCTP) and the use of the M3UA layer protocol elements. SCTP takes the place of TCP and the M3UA layer enables a seamless operation of the MTP3 User peers in both the SS7 and IP domains. Though Liao utilizes many of the same layers as the present invention, Liao does not utilize the SCTP and M3UA layer. Neither does Liao disclose sending SS7 signals to the signaling gateway converting the SS7 signals to IP, sending to another signaling gateway and converting the IP to SS7 for delivery to a SS7 signaling point. Therefore, the Applicant requests the withdrawal of the rejection of claim 1.

Amended claims 12 and 18 contain novel limitations analogous to the limitations in amended independent claim 1. This being the case, the Applicant respectfully requests withdrawal of the rejection of these claims.

Claims 2-4, 13, 19-25, 32 and 33 depend respectively from amended independent claims 1, 12 and 18 and recite further limitations in combination with the

novel elements of claims 1, 12 and 18. The Applicant respectfully requests the withdrawal of the above rejected claims.

Claim Rejections – 35 U.S.C. § 103 (a)

Claims 6-11, 14-17, 26 and 29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Liao in view of Shmulevich, et al. (US 6,515,985 hereinafter Shmulevich). The Applicant respectfully traverses the rejection of these claims.

The Shmulevich reference appears to provide a system for transferring cellular communications in a network over a common packet switched communication link to another gateway associated with another of the network switches. However, Shmulevich does not disclose utilizing M3U-A, one of the missing elements in Liao.

Claims 6-11, 14-17, 26 and 29 depend from amended claims 1, 12 and 18 and contain the same limitations. Applicant respectfully submits that these claims, being dependent upon claims 1, 12 and 18 respectively, are allowable for similar reasons as the Shmulevich and Liao references fail to include at least the M3U-A limitation recited in Applicant's independent claims. Reconsideration of the amended dependent claims is respectfully requested.

Claims 27, 28, 30 and 31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Liao in view of Mousseau, et al. (Network Working Group, INTERNET DRAFT, SS7 MTP2-User *Adaptation Layer* M3UA, Feb. 2001, hereinafter Mousseau). The Applicant respectfully traverses the rejection of these claims. Claim 27 has been canceled rendering the rejection of this claim moot.
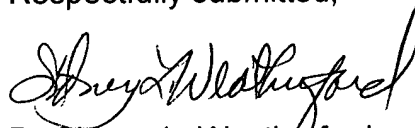
The Mousseau reference appears to be a working draft for defining a protocol for the transport of any SS7 MTP3-User signaling over IP. However, there doesn't appear to be first and second signal gateways on either end of the signal path that converts from SS7 to IP and IP to SS7. The Examiner's reconsideration of the dependent claims in light of the current amendments to the independent claims is respectfully requested.

CONCLUSION

In view of the foregoing remarks, the Applicant believes all of the claims currently pending in the Application to be in a condition for allowance. The Applicant, therefore, respectfully requests that the Examiner withdraw all rejections and issue a Notice of Allowance for all pending claims.

The Applicant requests a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,

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